

IN THE CLAIMS:

The following listing of the claims replaces all earlier listings and all earlier versions.

1. (Currently Amended) A computer-implemented method of restructuring an input HTML document to comply with strict HTML, said method comprising the steps of:

(a) linearly traversing ~~said~~ the input HTML document to create a hierarchical tree structure representation, ~~said~~ the traversal maintaining a current insertion point for elements within ~~said~~ the tree structure representation;

(b) during ~~said~~ the traversal, identifying ~~those~~ elements of ~~said~~ the input HTML document that violate strict HTML, and, for each ~~said~~ identified element:

(b)(i) retracing ~~said~~ the tree structure representation from ~~said~~ the current insertion point to identify ~~[[an]]~~ a further insertion point from which ~~said~~ the identified element can depend, ~~said~~ the retracing comprising noting each parent element of ~~said~~ the identified element passed during ~~said~~ the retracing;

(b)(ii) at ~~said~~ the further insertion point, creating new elements in ~~said~~ the tree structure representation corresponding to ~~those~~ ~~said~~ the parent elements passed during ~~said~~ the retracing, ~~said~~ the new elements being created in reverse chronological order to that encountered during ~~said~~ the retracing; and

(b)(iii) appending ~~said~~ the identified element to a terminal one of ~~said~~ the new elements by creating a link from the appended identified element to a first parent element encountered during the retracing; and

(c) converting ~~said~~ the tree structure representation into an output HTML document.

2. (Canceled).

3. (Currently Amended) ~~[[A]]~~ The method according to claim ~~[[2]]~~ 1, wherein ~~said~~ the link comprises a vector.

4. (Currently Amended) ~~[[A]]~~ The method according to claim 1, wherein step (b)(iii) comprises copying a syntax of ~~[[a]]~~ the first ~~said~~ parent element encountered during ~~said retracting~~ the retracing to ~~said~~ the appended identified element.

5. (Currently Amended) ~~[[A]]~~ The method according to claim 1, wherein one or more of ~~said~~ the elements comprises information associated therewith, said method comprising the further steps, before step (a), of:

performing an initial pass of ~~said~~ the input HTML document to identify ~~said~~ the elements having ~~said~~ the associated information, and maintaining a record of each such element and the corresponding associated information whereby each time ~~said~~ the element is placed in ~~said~~ the tree structure representation, the corresponding associated information is associated therewith.

6. (Currently Amended) ~~[[A]]~~ The method according to claim 1, further comprising the ~~further~~ step of:

(d) reproducing ~~said~~ the output HTML document.

7. (Currently Amended) ~~[[A]]~~ The method according to claim 6, wherein ~~said~~ the output HTML document is reproduced using a video display.

8. (Currently Amended) ~~[[A]]~~ The method according to claim 6, wherein ~~said~~ the output HTML document is reproduced using a printer.

9. (Currently Amended) ~~Apparatus~~ An apparatus for restructuring an input HTML document to comply with strict HTML, said apparatus comprising:

means for linearly traversing ~~said~~ the input HTML document to create a hierarchical tree structure representation, ~~said~~ the traversal maintaining a current insertion point for elements within ~~said~~ the tree structure representation;

means for identifying, during ~~said~~ the traversal, an element of ~~said~~ the input HTML document that violates strict HTML;

means for retracing ~~said~~ the tree structure representation from ~~said~~ the current insertion point to identify ~~[[an]]~~ a further insertion point from which ~~said~~ the identified element can depend, ~~said~~ the retracing comprising noting each parent element of ~~said~~ the identified element passed during ~~said~~ the retracing;

means for creating, at ~~said~~ the further insertion point, at ~~least~~ least one new element in ~~said~~ the tree structure representation corresponding to ~~those~~ ~~said~~ the parent

elements passed during ~~said the~~ retracing, ~~said the~~ new elements being created in reverse chronological order to that encountered during ~~said the~~ retracing; and

means for appending ~~said the~~ identified element to a terminal one of ~~said the~~ new elements by creating a link from the appended identified element to a first parent element encountered during the retracing; and

means for converting ~~said the~~ tree structure representation into an output HTML document.

10. (Canceled).

11. (Currently Amended) ~~Apparatus~~ The apparatus according to claim [[10]] 9, wherein ~~said the~~ link comprises a vector.

12. (Currently Amended) ~~Apparatus~~ The apparatus according to claim 9, wherein said means for appending copies a syntax of [[a]] the first ~~said~~ parent element encountered during ~~said retracting the retracing~~ to ~~said the~~ appended identified element.

13. (Currently Amended) ~~Apparatus~~ The apparatus according to claim 9, wherein one or more of ~~said the~~ elements comprises information associated therewith, and said apparatus further comprises:

means for performing an initial pass of ~~said the~~ input HTML document to identify ~~said the~~ elements having ~~said the~~ associated information, and for maintaining a record of each such element and the corresponding associated information whereby each

time ~~said~~ the element is placed in ~~said~~ the tree structure representation, the corresponding associated information is associated therewith.

14. (Currently Amended) ~~Apparatus~~ The apparatus according to claim 9, further comprising ~~[[:]]~~ means for reproducing ~~said~~ the output HTML document.

15. (Currently Amended) ~~Apparatus~~ The apparatus according to claim 14, wherein ~~said~~ means for reproducing comprises a video display.

16. (Currently Amended) ~~Apparatus~~ The apparatus according to claim 14, wherein ~~said~~ means for reproducing comprises a printer.

17. (Currently Amended) A computer readable medium, having a program recorded thereon, ~~where~~ wherein the program is configured to make a computer execute a procedure to restructure an input HTML document to comply with strict HTML, ~~said~~ program comprising:

code for linearly traversing ~~said~~ the input HTML document to create a hierarchical tree structure representation, ~~said~~ the traversal maintaining a current insertion point for elements within ~~said~~ the tree structure representation;

code for, during ~~said~~ the traversal, identifying an element of ~~said~~ the input HTML document that violate strict HTML;

code for retracing ~~said~~ the tree structure representation from ~~said~~ the current insertion point to identify ~~[[an]]~~ a further insertion point from which ~~said~~ the identified

element can depend, ~~said~~ the retracing comprising noting each parent element of ~~said~~ the identified element passed during ~~said~~ the retracing;

code for creating new elements in ~~said~~ the tree structure representation at ~~said~~ the further insertion point, ~~said~~ the new elements corresponding to ~~those~~ ~~said~~ the parent elements passed during ~~said~~ the retracing, ~~said~~ the new elements being created in reverse chronological order to that encountered during ~~said~~ the retracing; and

code for appending ~~said~~ the identified element to a terminal one of ~~said~~ the new elements by creating a link from the appended identified element to a first parent element encountered during the retracing; and

code for converting ~~said~~ the tree structure representation into an output HTML document.

18. (Canceled).

19. (Currently Amended) ~~[[A]]~~ The computer readable medium according to claim ~~[[18]]~~ 17, wherein ~~said~~ the link comprises a vector.

20. (Currently Amended) ~~[[A]]~~ The computer readable medium according to claim 17, wherein ~~said~~ the code for appending comprises code for copying a syntax of ~~[[a]]~~ the first ~~said~~ parent element encountered during ~~said~~ retracting the retracing to ~~said~~ the appended identified element.

21. (Currently Amended) [[A]] The computer readable medium according to claim 17, wherein one or more of ~~said~~ the elements comprises information associated therewith, and said program further comprises:

code for performing an initial pass of ~~said~~ the input HTML document to identify ~~said~~ the elements having ~~said~~ the associated information, and for maintaining a record of each such element and the corresponding associated information whereby each time ~~said~~ the element is placed in ~~said~~ the tree structure representation, the corresponding associated information is associated therewith.

22. (Currently Amended) [[A]] The computer readable medium according to claim 17, said program further comprising [[:]] code for reproducing ~~said~~ the output HTML document.

23. (Currently Amended) [[A]] The computer readable medium according to claim 22, wherein ~~said~~ the output HTML document is reproduced using a video display.

24. (Currently Amended) [[A]] The computer readable medium according to claim 22, wherein ~~said~~ the output HTML document is reproduced using a printer.